

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017550**Date Inspected:** 11-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr.Qiu Wen.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

NDT

BAY 11

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as West Tower Lift 5. The weld designations reviewed are as follows.

WSD1-TL5-4B/F-11A/B, 14A/B, 24, 1,

WSD1-TL5-4B/F-3,

WSD1-TL5-4E/F-1A/B, 17A/B, 9A/B, 32A/B, 2, 19, 7, 11, 31

WSD1-TL5-4F/F-1A/B, 8A/B, 5A/B, 2,

NDT Notification No-06917

This QA Inspector observed the following work in progress:

BAY 11

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SMAW PROCESS:

This QA Inspector observed ZPMC qualified welding personnel identified as 040723, Perform Shielded Metal Arc Welding (SMAW) on West Tower lift 5 skin E cover plate on cope hole area. Joint identified as WSD1-TL5-4F/F-13, 14, 15, 16. ZPMC QC Identified as Xu Jie. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4314-Tc-P5-2

This QA Inspector observed ZPMC qualified welding personnel identified as 040723, Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 5 skin E cover plate on cope hole area. Joint identified as ESD1-TL5-2F/F-13, 14, 15, 16. ZPMC QC Identified as Xu Jie. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4314-Tc-P5-2

BAY 10

OBG Bike path plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 057180, 053869, 040302, 052075, Perform Flux Core Arc Welding (FCAW) on OBG bike path stringer plate to deck plate. Joint identified as BK004A6-031-051, 052, 013, 014, 019, 020, 140, 141, 142, 143, 073, 074. ZPMC QC Identified as Li Peng fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

OBG Bike path plate SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040268, 056369, Perform Shielded Metal Arc Welding (SMAW) on OBG bike path plate. Joint identified as BK004A7-027-129, 144. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2113.

OBG Bike path plate SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040268, 056369, Perform Shielded Metal Arc Welding (SMAW) on OBG bike path plate. Joint identified as BK004A7-027-018, 019, 020, 021. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2113.

Magnetic Particle Testing:

This QA Inspector observed ZPMC Magnetic Particle Testing Inspector, performed MT on OBG bike path plate. Bike path plate identified as BK004A4-026.

BAY 11

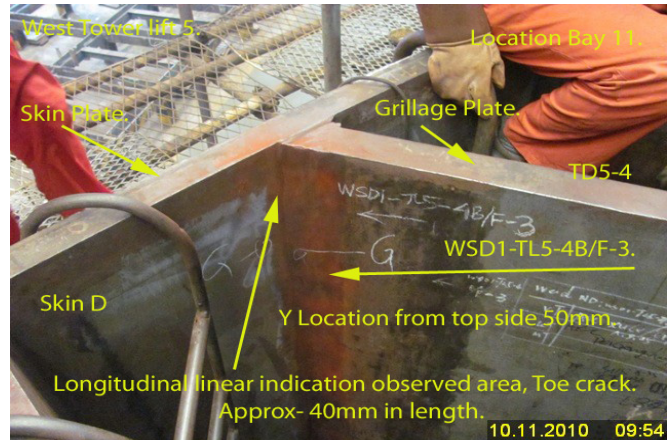
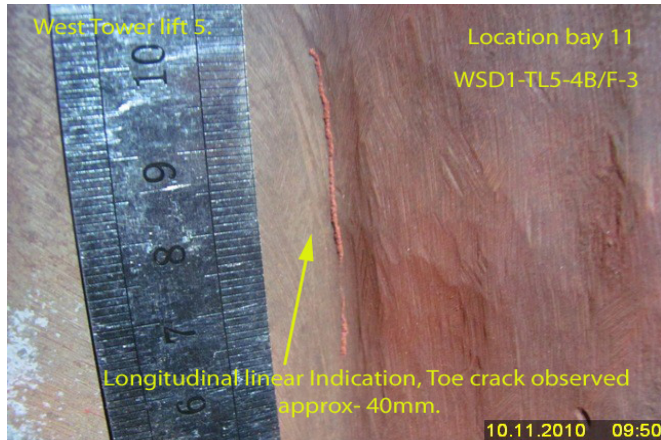
During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located in West Tower lift 5 Grillage plate, WSD1-TL5-4B/F-3, this Quality Assurance (QA) Inspector discovered the following issues One (1) Longitudinal linear indication, Toe crack measuring approximately 40mm in length. The weld is identified as: WSD1-TL5-4B/F-3. The Weld is a (CJP) completed joint penetration weld, joining the grillage plate to skin plate. The material is designated as Non Seismic Performance Critical Member (NON SPCM). The member is located in Bay 11. The Notice of Witness Inspection Number (NWIT) is 06917. The indication is located on CJP weld area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform one hundred (100) percent MT inspection of this weld.

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The attached photographs provide additional detail This QA inspector generated incident report for this date.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng Phone: 15921845703, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh
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Quality Assurance Inspector

Reviewed By:	Clifford,William
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QA Reviewer
